

<b>Interview Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/885,408	MIKI ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	Guy J. Lamarre, P.E.	2133

All participants (applicant, applicant's representative, PTO personnel):

(1) Guy J. Lamarre, P.E. (3) \_\_\_\_\_  
 (2) Edwin Garlepp (4) \_\_\_\_\_

Date of Interview: 29 July 2004.

Type: a) Telephonic b) Video Conference  
 c) Personal [copy given to: 1) applicant 2) applicant's representative]

Exhibit shown or demonstration conducted: d) Yes e) No.  
 If Yes, brief description: \_\_\_\_\_.

Claim(s) discussed: 1,3-6 and 8-13.

Identification of prior art discussed: Tanaka et al. (PCT Pub. No. W098/58468.

Agreement with respect to the claims f) was reached. g) was not reached. h) N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: See Continuation Sheet.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE, OR THE MAILING DATE OF THIS INTERVIEW SUMMARY FORM, WHICHEVER IS LATER, TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.



Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.

\_\_\_\_\_  
 Examiner's signature, if required

## Summary of Record of Interview Requirements

### Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record

A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

### Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews

#### Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

#### 37 CFR §1.2 Business to be transacted in writing.

All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:

- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:

- 1) A brief description of the nature of any exhibit shown or any demonstration conducted,
- 2) an identification of the claims discussed,
- 3) an identification of the specific prior art discussed,
- 4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
- 5) a brief identification of the general thrust of the principal arguments presented to the examiner,  
(The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
- 6) a general indication of any other pertinent matters discussed, and
- 7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

### Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Continuation of Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments:

Applicant's representative states that the above prior art in Japanese was reviewed by inventors who aver that such reference does not teach the claimed invention. As a result, rejections in view of Tanaka et al. (PCT Pub. No. W098/58468) will be withdrawn when reply to outstanding office action is filed.

Applicant's proposed amendments are as follows:

clarification of 3-level ACK/NAK signal of claims 1 and 4,  
clarification of limitation (b) in Claim 6 along with clarifying 'them',  
clarification of Claim 9 re: demodulation of received packet,  
Claims 10-11 having similar limitations as Claims 6 and 9 are clarified by association.  
Claims 12-13 will be cancelled.

Note:

This interview was given at the discretion of the undersigned to expedite prosecution of the case since a timely-submitted proposed agenda had not been previously received to allow the USPTO sufficient preparation for the related subject matter.

In response to Applicant's remarks during the interview regarding contents of instant interview summary, Applicant is reminded that 'pursuant to 37 CFR1.133(b), it is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file.'

As requested by Applicant's representative, instant Interview Summary will be faxed via 703 413-2220.

Technology Center 2100

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305-0755  
5463

**United States Patent  
Office**

# Fax

**To:** EDWIN GARLEPP      **From:** EXAMINER LAMARRE  
**Fax:** 703 413-2220      **Date:** 7/29/2004  
**Phone:** 703 412 5920      **Pages:** 4  
**Re:** 09/885,408      **CC:**

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**Comments:**

*INTERVIEW SUMMARY AS REQUESTED*

**OBLO**  
**SPIVAK**  
**MCCLELLAND**  
**MAIER**  
**&**  
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**FACSIMILE**

PLEASE CALL US AT (703) 413-3000 IF THIS MESSAGE YOU RECEIVE IS INCOMPLETE OR NOT LEGIBLE

TO	Examiner Yufu Lamane	07/28/2004
NAME	US PTO	DATE
COMPANY/FIRM		FAX #
NUMBER OF PAGES INCLUDING COVER:	7	CONFIRM FAX: <input type="checkbox"/> YES <input type="checkbox"/> NO
FROM	Edwin D. Garlepp	209657US90
NAME	703 412 5920	OUR REFERENCE
DIRECT PHONE #		09/885,408
YOUR REFERENCE		

MESSAGE: Please see attached sheets.

# 45330

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**Summary of the Items to be discussed in the July 29, 2004 personal interview.**

- 1) Proposed amendment to the claims as indicated on the attached sheets.
- 2) Claims 1, 4 and 9, as amended, each recite reporting the reliability of a received packet utilizing the ACK/NACK signal by using not less than three levels. An example of a multi-level reliability scheme is shown in table 1 of Applicant's specification as originally filed. None of the cited references disclose this feature and the outstanding Official Action does not address this feature. Applicants are willing to discuss claim changes that might clarify this feature for the Examiner.
- 3) Claim 1 also recites determining based on the reliability of the received packet whether or not the received packet should be restored to be combined with a retransmission packet, when the received packet includes an error. None of the cited references disclose this feature. The outstanding Official Action apparently cites Khan's hybrid ARQ as teaching this feature. However, Khan teaches combining packets that are transmitted simultaneously rather than combining a previously transmitted packet and a retransmitted packet as required by Applicant's Claim 1
- 4) Claims 6 and 9 recite that the ACK/NACK signal is transmitted to both the transmission station and host station of the plurality of reception stations. This feature allows the host station and the transmission station to independently determine whether or not a packet error occurs. This feature is not taught by any of the cited references and not addressed in the outstanding Official Action.
- 5) Applicant's Claims 10 and 11 recite that the ACK/NACK signal is transmitted to both the mobile station and the host station, similar to the feature discussed with respect to Claims 6 and 9 above. Thus, the cited references also do not disclose this feature.

I look forward of seeing you on July 29 at 2:00 p.m.

Edwin D. Garlepp  
Registration No. 45,330

Claims 1-13 are presented below:

1. (Currently Amended) A communication method comprising the steps of:
  - a) transmitting an ACK signal indicating that a received packet includes no error or a NACK signal indicating that the received packet includes error from a reception station to a transmission station, and performing automatic repeat request;
  - b) obtaining reliability of the received packet when demodulating it the received packet at the reception station; and
  - c) reporting from the reception station to the transmission station the reliability of the received packet, utilizing the ACK/NACK signal by using not less than three levels;
  - d) determining based on the reliability of said received packet whether or not said received packet should be stored to be combined with a re-transmission packet, when said received packet includes an error; and
  - e) performing re-transmission control based on the determination made in said step d).

2. (Canceled). *(priorably)*

3. (Previously Presented) The method as claimed in claim 1, further comprising the step of f) performing control of a transmission parameter at the transmission end based on the ACK/NACK signal transmitted from the reception end.

4. (Currently Amended) A communication method in a mobile communication system performing power control at a transmission station so that reception quality at a reception station may be kept constant, comprising the steps of:

a) transmitting an ACK signal indicating that a received packet includes no error or a NACK signal indicating that the received packet includes error from a reception station to a transmission station, and performing automatic repeat request;

b) storing a history of the received ACK/NACK signals, and performing control of a transmission parameter utilizing at least one ACK/NACK signal and a transmission power control signal at the transmission station; and

c) performing re-transmission control based on the transmission parameter, wherein the ACK/NACK signal is expressed by not less than three levels.

5. (Previously Presented) The method as claimed in claim 4, further comprising the step of d) re-transmitting a retransmission packet re-built so as to be able to be properly combined with an already transmitted packet at the reception end, when an information transmission rate for transmission from the transmission end is changed through the transmission parameter control at the transmission end.

6. (Previously Presented) A communication method in a mobile communication system, comprising the steps of:

a) a reception station transmitting an ACK signal indicating that a received packet includes no error or a NACK signal indicating that the received packet includes error, to a transmission station, and performing automatic repeat request;

b) when uplink site diversity reception is performed such that a plurality of reception (base) stations simultaneously receive a signal transmitted from a transmission station, the plurality of reception stations generating the ACK/NACK signals, and transmitting them to the transmission station and a host station of the plurality of reception stations;

Fig 9.

c) said host station of the plurality of reception stations receiving the ACK/NACK signals from the plurality of reception stations, and, upon receiving more than n ACK signals, where n denotes an integer not less than 1, generating the ACK signal so as to transmit it to the respective reception stations; and

d) said transmission station performing re-transmission control utilizing the ACK/NACK signals from the plurality of reception stations.

7. (Canceled).

*previously*

8. (Currently Amended) The method as claimed in claim 6, further comprising the step of e) determining at the mobile station that proper reception was performed at the reception end, when the mobile station receives the ACK/NACK signals from the plurality of base stations which include not less than n  $[(\leq 1)]$   $(\geq 1)$  ACK signals.

9. (Previously Presented) A communication method in a mobile communication system, comprising the steps of:

a) a reception station transmitting an ACK signal indicating that a received packet includes no error or a NACK signal indicating that the received packet includes error, to a transmission station, and performing automatic repeat request;

b) when uplink site diversity reception is performed such that a plurality of reception stations simultaneously receive a signal transmitted from a transmission station, the reception station obtaining reliability of a received packet upon demodulating the received packet, and reporting to the transmission station and a host station of the plurality of reception stations the reliability of the received packet with the ACK/NACK signal by not less than three levels; and

c) said host station generating based on the plurality ACK/NACK signals reported thereto the ACK/NACK signal, and, said plurality of reception stations transmitting the same ACK/NACK signals generated by the host station to the transmission station.

10. (Currently Amended) A communication method in a mobile communication system, comprising the steps of:

a) transmitting an ACK signal indicating that a received packet includes no error or a NACK signal indicating that the received packet includes error, from a reception end to a transmission end, and performing automatic repeat request; and

b) when downlink site diversity reception is performed such that signals transmitted from a plurality of base stations are simultaneously received by a mobile station, demodulating a received packet at the mobile station, generating the ACK/NACK signal, and transmitting ~~it~~ the ACK/NACK signal to the mobile station and a host station of the plurality of base stations; and

c) when a host station of the plurality of base stations receives the ACK/NACK signals via the plurality of base stations which include not less than  $[(\leq 1)] (\geq 1)$  ACK signals, determining that the plurality of base stations performed proper reception, then re-transmission control being performed at the plurality of base stations.

11. (Previously Presented) A base station using an ACK/NACK signal and performing automatic repeat request, wherein said base station participates in uplink site diversity as one of a plurality of base stations that simultaneously receive a signal transmitted from a mobile station, said base station comprising:

a part generating the ACK/NACK signal and transmitting it to the mobile station and to a host station; and

a part receiving the common ACK/NACK signal from the host station of the plurality of base stations.

12. (Canceled).

13. (Canceled).